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[NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

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(72) Inventors; and

(75) Inventors/Applicants (for US only): **RÜTTEN, Walter** [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).
OVERDICK, Michael [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).

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(74) Agents: **VOLMER, Georg** et al.; Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).

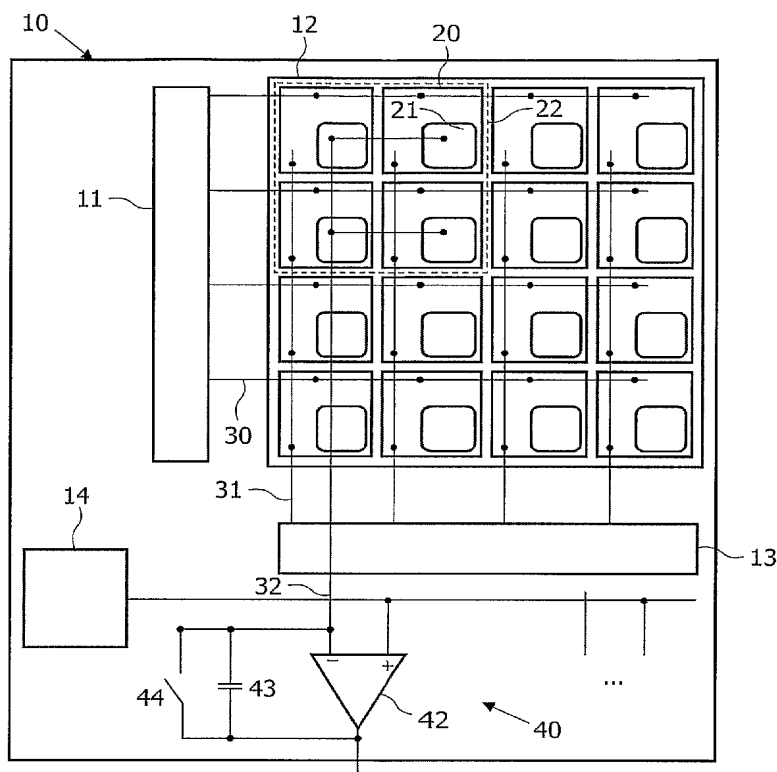
(71) Applicant (for DE only): **PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH** [DE/DE]; Stein-damm 94, 20099 Hamburg (DE).

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(71) Applicant (for all designated States except DE, US):
KONINKLIJKE PHILIPS ELECTRONICS N. V.

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(54) Title: X-RAY DETECTOR WITH PHOTOGATES AND DOSE CONTROL



(57) Abstract: The invention relates to a radiation detector apparatus (10) with an array (12) of detector pixels. Each pixel (20) of the detector comprises a photogate electrode (21) under which electrical charges produced by incident radiation (v, X) are collected. The change of these charges gives rise to displacement currents in photogate lines (32) connected to the photogate electrodes (21) which may be monitored by current sensors (40). Thus the charges collected by all photogate electrodes (21) connected to a photogate line (32) can be measured during an ongoing exposure, allowing for advanced dose control methods of the illumination.

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